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A Remarkable New Phalangodid, *Dongmoa oshimensis*, from Japan

With 3 Text-figures

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(Communicated by K. TAKEWAKI)

A very interesting phalangodid was captured by Dr. Jun-ichi Aoki of the Tokyo University from Amami-oshima, one of Ryukyu islands. The specimen has been found to be a new species of the genus *Dongmoa* belonging to the subfamily Podoctinae. Hitherto the genus represented by a single species has been known only from Tonking, North Vietnam, so occurrence of a new member on this island is of interest from the viewpoint of zoogeography.

Fam. Phalangodidae Simon

Subfam. Podoctinae Roewer

Dongmoa oshimensis n. sp. (Figs. 1-3)

Male.—Total body length 3.65 mm, length of scute 3.20 mm, width of carapace at widest portion 2.00 mm, width of tergal region at widest portion 2.15 mm.

Dorsum of the body nearly ellipsoid in outline, lightly constricted above second coxa and at second scutal area. Between eyes an enormous elevation: 0.80 mm wide at widest, basal portion, 0.90 mm long except for apical spine, which occurs at the anterior margin of the cephalothorax, slants forward and terminating with a large apical spine, 0.34 mm long; just behind it there is another only slightly shorter spine; two accessory short spines are present on either side of this elevation; furthermore, numerous small or somewhat enlarged hair-tipped rounded tubercles are scattered on the entire surface of the elevation. Anterior to each eye is a fairly stout spine, which extends forward to touch another spine of similar shape occurring at the anterior margin of the cephalothorax. Anterior margin of cephalothorax with several prominent spines at anterior lateral border. Surface of cephalothorax covered with numerous small scattered tubercles, and behind the elevation there is a pair of strong, conical tubercles or spines of 0.20 mm length. Scutal groove is not prominent, first scutal area without a longitudinal groove, each transverse groove roofed by small blunt tubercles. There is a row of small rounded tubercles and a median pair

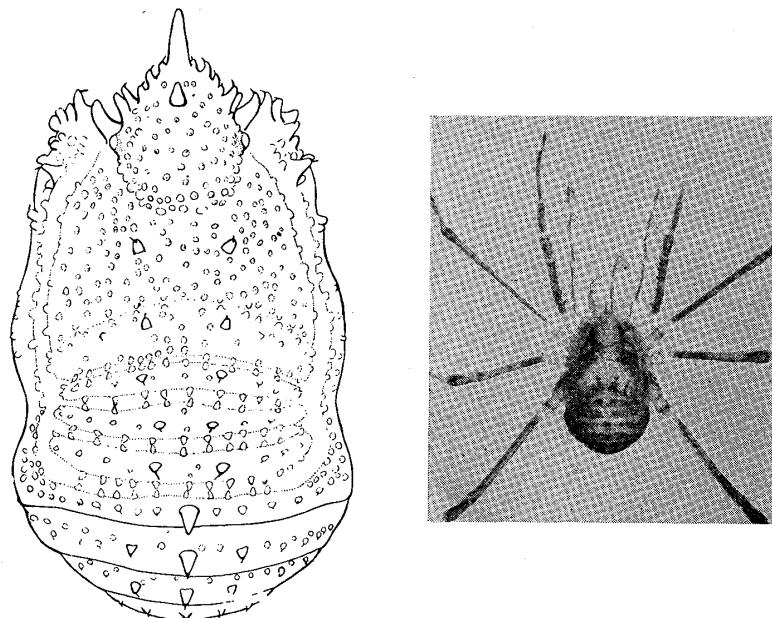


Fig. 1. *Dongmoa oshimensis* n. sp. Dorsal views of male; left, 19 \times and right, 4 \times .

of strong conical tubercles on the surface of the first to fourth areas and a similar but longer tubercle 0.27 mm length on the mid-posterior surface of the scute. Free tergites each with a transverse row of three strong conical tubercles, of which the median is the larger, in addition to a row of small, low, rounded tubercles. A submarginal row of similar tubercles on either side of the scute. Anal plate with numerous small tubercles.

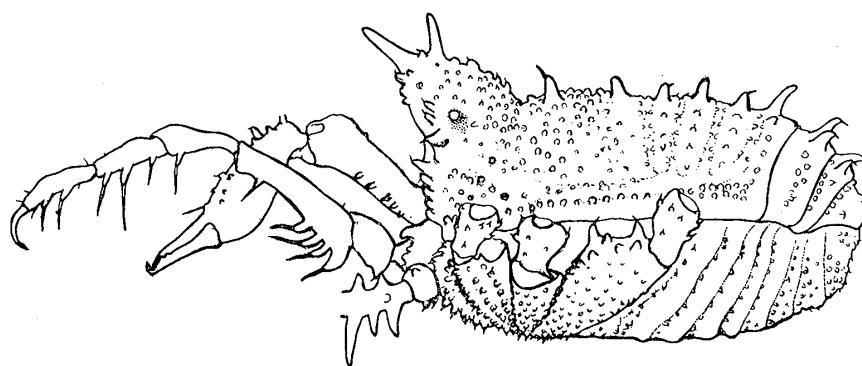


Fig. 2. *Dongmoa oshimensis* n. sp. Lateral view of male, 15 \times .

Coxae of all legs clothed with hair-tipped granules; somewhat large granules on the pro-lateral and hind margins of first coxa; similar granules more or less arranged in three rows on second coxa; third coxa armed anteriorly and posteriorly with a transverse row of small blunt tubercles; fourth coxa with several rather large tubercles on the pro-lateral margin. Genital operculum also with small, hair-tipped granules. Each sternite provided with a transverse row of very small granules.

Chelicera: Proximal segment 0.58 mm wide, 1.00 mm long, distal segment 0.45 mm wide, 1.88 mm long.

Proximal segment a little widened distally but with no prominent dorsal protuberance, furnished dorsally with a few scattered small tubercles, and armed ventro-laterally with a longitudinal series of tubercles (Fig. 3A), which are eight or nine in number, of which one is situated at the distal end and three rather small ones at the proximal portion, but four or five in median portion long, fairly stout and bluntly pointed, and usually slightly bent forward; on the ventro-medial surface there are five much shorter tubercles in a row. Distal segment (Fig. 3 B-C) somewhat distended, armed with a longitudinal row of four strong, stout tubercles near medial ridge of dorsal surface and along the lateral margin there are seven to eight less strong tubercles running parallel with the medial row of

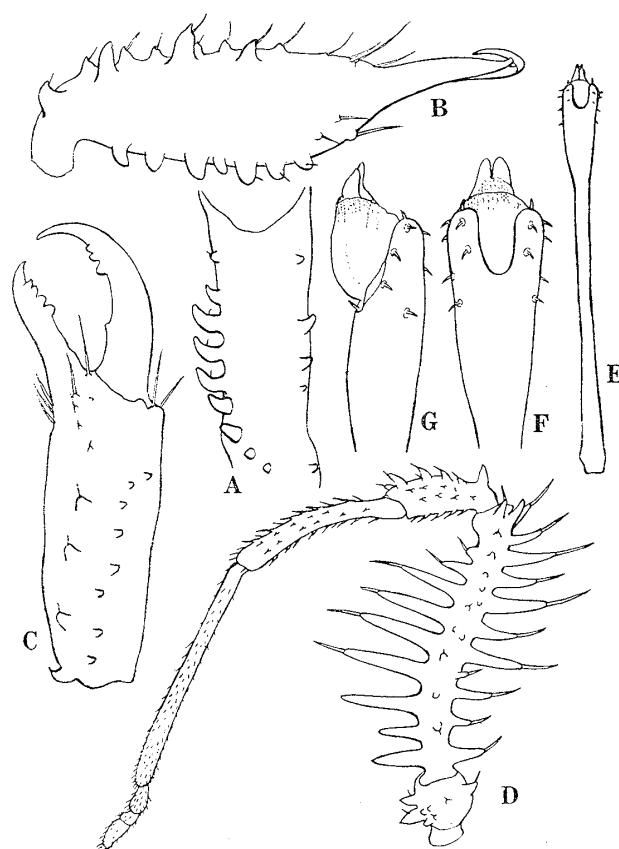


Fig. 3. *Dongmoa oshimensis* n. sp. A. Right proximal segment of chelicera, below, 29 \times . B. Left distal segment of chelicera, medial, 29 \times . C. Right distal segment of chelicera, above, 29 \times . D. Left leg I, lateral view, 17 \times . E-G. Penises: E-F. ventral views, 37 \times and 88 \times , respectively; G. lateral view, 88 \times .

tubercles; furthermore, the segment is provided with a row of seven or more prominent stout tubercles along the ventro-medial surface. Chelae with three or four teeth distally on the inner surfaces.

Palpus: Trochanter 0.30 mm wide, 0.36 mm long; femur 0.20 wide at apical portion, 0.30 wide at basal portion, 1.12 long; patella 0.20 W, 0.69 L; tibia 0.17 W, 0.66 L; tarsus 0.15 W, 0.70 L; tarsal claw 0.55 L. Total length except for a claw 3.53 mm.

Palpus (Fig. 2) slightly longer than body, armed with long spines. Trochanter short pedunculate, globular, armed ventrally with a short spine, unarmed above. Femur laterally compressed, the basal portion one and one half times as wide as the tip, armed ventrally, on basal third, with a row of four strong spines, one of which located proximally is particularly stout, and all the spines slightly arched forward, another much smaller spine is near the distal end below, distally on the medial surface with a short spine. Patella slender, widened distally, armed with two spines on the ventro-medial surface and one on the ventro-lateral surface. Tibia and tarsus flattened below, tibia with three spines on each side, and tarsus with two spines on each side. Tarsal claw shorter than tarsus.

Legs:

	Trochanter	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
Leg I	0.40	1.70	0.63	0.90	1.50	0.53	5.66 mm
Leg II	0.40	3.00	0.75	2.75	2.45	1.00	10.35
Leg III	0.42	1.70	0.70	1.69	2.65	0.55	7.71
Leg IV	0.45	2.50	0.77	2.63	3.45	0.56	10.36

First leg (Fig. 3D): Trochanter armed ventrally with two short spines and dorsally with one spine; viewed from the side femur curved in S-shape, with eight to nine long, strong spines below and about ten spines above, two other spines on either side of distal margin, lateral side with several spinous tubercles; patella dorsally, on both sides, with four to five short conical spines, one or two of them located at the basal end larger than the others, similar but less conspicuous spines are on the lateral and ventral surfaces; tibia clothed with spinous hairs; metatarsi and tarsi clothed only with hairs. Second to fourth legs: Slender, relatively long, fourth femur straight from above; trochanters armed with hair-tipped tubercles; femora and patellae somewhat roughened, with hair-tipped tubercles, remaining leg segments clothed only with hairs. Number of tarsal segments: 3-4-5-5. Distitarsus of first tarsus with two segments; second tarsus with two segments. Third and fourth tarsi without scopulae and with smooth double claws.

Penis: The penis (Fig. 3E-G) has a deeply cleft ventral plate furnished with eight pairs of short spines.

Color: Dorsum of the body rusty to reddish yellow with dark brown blotches. Cephalothorax with dark markings in lateral portions as shown in Figure 1, right. Dark brown blotches present around eyes. Second to fifth scutal areas and free tergites dark margined. Chelicera and palpus yellowish. Coxae of all legs and genital plate yellowish, sternites reddish brown. Legs yellowish mottled with reddish brown; trochanters light; femora reddish brown with light bases; patellae reddish brown; tibiae reddish yellow with dark, broad, distal bands; metatarsi with dark, proximal and distal bands; tarsi yellowish.

Female: Not known.

Type: Holotype male, Mt. Yuwandake, Amami-oshima, one of Ryukyu

islands, July 16, 1963 (Jun-ichi Aoki).

Type is deposited in the Zoological Laboratory of Hiroshima University.

Remarks: The present new species is close to *Dongmoa silvestri* Roewer from Tonking, but differs from the latter in possessing a row of four instead of seven spines on the proximo-ventral surface of the femur of palpus and also in having a row of tubercles on ventro-medial surface in the distal segment of chelicera. There is some resemblance to *Idzubius akiyamae* (Hirst) from Japan proper. However, in *Idzubius* the first to fourth scutal areas bear no prominent processes (tubercles) and the femur of palpus having a row of three instead of four spines near the proximal end below.

The author wishes to thank Dr. J. Aoki who provided him with a specimen.

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